



State Revolving Fund Loan Programs Drinking Water, Wastewater, Nonpoint Source

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

TIPTON MUNICIPAL UTILITIES CSO 007 & CSO 009 ELIMINATION AND CSO 008 REMEDIATION

STATE REVOLVING FUND PROJECT # WW12 80 06 02

DATE: March 5, 2012

TARGET APPROVAL DATE: April 4, 2012

I. INTRODUCTION

The above entity has applied to the State Revolving Fund (SRF) Loan Program for a loan to finance all or part of the wastewater project described in the accompanying Environmental Assessment (EA). As part of facilities planning requirements, an environmental review has been completed which addresses the project's impacts on the natural and human environment. This review is summarized in the attached EA, which can also be viewed at <http://www.in.gov/ifa/srf/>.

II. PRELIMINARY FINDING OF NO SIGNIFICANT IMPACT (FNSI)

The SRF has evaluated all pertinent environmental information regarding the proposed project and determined that an Environmental Impact Statement is not necessary. Subject to responses received during the 30-day public comment period, and pursuant to Indiana Code 4-4-11, it is our preliminary finding that the construction and operation of the proposed facilities will result in no significant adverse environmental impact. In the absence of significant comments, the attached EA shall serve as the final environmental document.

III. COMMENTS

All interested parties may comment upon the EA/FNSI. Comments must be received at the address below by the target project approval date. Significant comments may prompt a reevaluation of the preliminary FNSI; if appropriate, a new FNSI will be issued for another 30-day public comment period. A final decision to proceed, or not to proceed, with the proposed project shall be effected by finalizing, or not finalizing, the FNSI as appropriate. Comments regarding this document should be sent within 30 days to:

Max Henschen
Senior Environmental Manager
State Revolving Fund -- IGCN 1275
100 N. Senate Ave.
Indianapolis, IN 46204
[mhensche \(at\) ifa.in.gov](mailto:mhensche@ifa.in.gov)

ENVIRONMENTAL ASSESSMENT

I. PROJECT IDENTIFICATION

Project Name and Address: **CSO 007 & CSO 009 Elimination
and CSO 008 Remediation Project**
Tipton Municipal Utilities (TMU)
113 Court Street
P.O. Box 288
Tipton, IN 46072-0288

SRF Project Number: WW 12 80 06 02

Authorized Representative: David Reep, Utility Manager

II. PROJECT LOCATION

Tipton is located in Tipton County, approximately 30 miles north of Indianapolis. There are two project areas: (1) the northwest section of the city where storm sewers will be installed to eliminate Combined Sewer Overflow (CSO) 007 and CSO 009, and (2) the south side, where the city will remove a sewer restriction which causes increased frequency and volume of discharges from CSO 008 into Cicero Creek.

The CSO 007 and CSO 009 project area is in Cicero Township in the Tipton USGS quadrangle, T21N, R4E in sections 10 and 11; the CSO 008 project is in section 11. See Figure 1.

III. PROJECT NEED AND PURPOSE

Most of Tipton's collection system is a combined sewer system that includes eight CSOs, which discharge untreated wastewater and storm water. CSOs 007 and 009 discharge into Buck Creek, while the remaining six CSOs discharge into Cicero Creek. A 1999 Stream Reach Characterization and Evaluation Report (SRCER) concluded that CSO discharges contribute to the *Escherichia coli* concentrations above the water quality standard in both waterways. However, the SRCER also found that both waterways are in nonattainment of the *E. coli* water quality standards in dry and wet weather upstream and downstream of the CSO discharges. Therefore, the reduction of CSO discharges in Tipton will improve the water quality in both Buck and Cicero creeks, but will not achieve compliance with the *E. coli* water quality standards.

Tipton entered into an Agreed Order with the Indiana Department of Environmental Management to implement the recommendations identified in the city's Long Term Control Plan (LTCP) to control CSOs. These include removing cross connections upstream of CSO 007 and 009 to eliminate CSO discharges to Buck Creek.

The city will also implement another project not identified in the LTCP: removing a hydraulic restriction in the combined sewer that causes increased overflows from CSO 008.

The proposed CSO 007 and CSO 009 project involves the installation of storm sewers in the northwest area of the city to eliminate cross connection 14 that affects flows to CSO 007 and cross connections 11 and 12 that impacts flows to CSO 009. New storm sewers will be installed along Dearborn Street, Kentucky Avenue, Columbia Avenue, Green Street, West Street, North Street, Walnut Street, Green Street, and Washington Street. CSO discharges 007 and 009 will become storm water discharges and the city will add new storm water outfalls into Buck Creek at Dearborn Street and Walnut Street.

The proposed CSO 008 project involves the replacement of two manholes and an 8-inch sewer with one larger manhole. The elimination of the 8-inch sewer will increase the hydraulic capacity of the sewer by 1.12 million gallons and allow this flow to be treated at the WWTP instead of being diverted to CSO 008.

IV. PROJECT DESCRIPTION

The proposed project includes (see Figure 2):

- A. installing approximately 1,862 feet of 12-inch storm sewer;
- B. installing approximately 1,584 feet of 15-inch storm sewer;
- C. installing approximately 718 feet of 18-inch storm sewer;
- D. installing approximately 428 feet of 21-inch storm sewer;
- E. installing approximately 1,746 feet of 24-inch storm sewer;
- F. installing approximately 406 feet of 30-inch storm sewer;
- G. installing approximately 1,313 feet of 36-inch storm sewer;
- H. installing approximately 1,153 feet of 42-inch storm sewer;
- I. replacing approximately 60 catch basins;
- J. installing two concrete headwalls;
- K. installing approximately 28 manholes;
- L. replacing approximately 2,385 square yards of pavement;
- M. replacing approximately 1,545 square yards of sidewalk;
- N. removing approximately three cross connections; and
- O. removing two manholes and installing one structure at CSO 008.

V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Estimated Cost Summary

<u>Construction Components</u>	<u>Costs</u>
Mobilization/Demobilization/Bonds	\$ 121,400
12-inch storm sewer	110,700
15-inch storm sewer	81,200
18-inch storm sewer	47,700
21-inch storm sewer	27,000
24-inch storm sewer	166,100
30-inch storm sewer	67,700
36-inch storm sewer	242,600
42-inch storm sewer	238,500
Pavement Replacement	142,600
Sidewalk Replacement	122,100
Replacing Catch Basins	90,000
Two Concrete Headwalls	10,000
Manholes	70,000
Cross Connection #11 Removal	300
Cross Connection #12 Removal	300
Cross Connection #14 Removal	800
CSO 008 Restriction Removal	50,000
8-inch Water Main Relocation	12,000
Erosion Control	20,000
Traffic Maintenance	10,000
Preconstruction Video	8,000
Construction Subtotal	\$1,639,000
Contingencies	164,000
Total Estimated Construction Cost	\$1,803,000

Non-Construction Costs

Administrative & Legal (Bond Counsel)	\$ 50,000
Engineering Fees	
Preliminary Engineering Report	17,000
Design and Bidding	140,000
Contract Administration	15,000
Construction Observation	65,000
Non-Construction Subtotal	\$ 287,300
Total Estimated Project Cost	\$2,090,300

- B. Tipton will borrow approximately \$2,090,300 from the State Revolving Fund Loan Program with a 20-year loan at an interest rate to be determined at the time of loan closing. Monthly user rates and charges may need to be analyzed to determine if adjustments are needed for loan repayment.

VI. DESCRIPTION OF EVALUATED ALTERNATIVES

- A. Two alternatives were evaluated for the CSO 007 and CSO 009 separation project including the "No Action" alternative. The "No-Action" alternative was rejected, since the city is under an Agreed Order to implement the proposed improvements outlined in its LTCP. The selected alternative is Sewer Separation; different layouts of proposed sewers were evaluated.
- B. Two alternatives were evaluated for the reduction of overflows from CSO 008 at CSO 008 including the "No Action" alternative. The "No Action Alternative was rejected, since CSO 008 would continue to have more overflows than necessary, due to a hydraulic restriction. The selected alternative is Removal of the Hydraulic Restriction at CSO 008.

VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

A. Direct Impacts of Construction and Operation

Undisturbed/Disturbed Land: All work will occur in land which has been previously disturbed by construction activity. All sewers and associated structures will be placed under existing streets or beneath sidewalks located immediately next to the roads.

Structural Resources (see Figures 3 and 4): The June 2010 Tipton County Indiana Historic Sites and Structures Inventory Interim Report identified several historical or architectural sites and historic district located within the proposed project areas. However, the project will not affect these sites.

The Fairview Cemetery, located on County Road 200 West does not appear on the Tipton Scattered Sites map from the Interim Report. The proposed manhole replacement at the intersection of South Street and West Street is approximately 850 feet east of the cemetery's western boundary.

The Tipton County Historical Society, in correspondence dated July 31, 2011, stated: *Our representative for the Tipton County Historical Society, Leon Warner, has driven over the "projected sewer separation project within the City of Tipton, Indiana" and determined that to the best of his ability there are no possible effects of the proposed project on historical resources.*

There are brick manholes and catch basins within the project area. These need to be replaced as part of the proposed project due to concerns with their structural integrity. There is the possibility of uncovering brick beneath the existing paved roads during construction. All trenches will be backfilled and paved over so that the roads are returned to existing conditions.

Construction and operation of the project will not alter, demolish or remove historic properties. If any visual or audible impacts to historic properties occur, they will be temporary and will not alter the characteristics that qualify such properties for inclusion in or eligibility for the National Register of Historic Places. The SRF's finding pursuant to the Section 106 of the national Historic Preservation Act is: "no historic properties affected."

Plants and Animals: The construction and operation of the project will not impact state or federal-listed endangered species or their habitat. Up to four trees and ten feet of scrub/shrub area along Buck Creek at each proposed outfall will need to be cleared for the installation of sewer pipe and concrete headwalls.

Prime Farmland: The proposed project will not cause a conversion of prime farmland.

Wetlands: The proposed project will not affect wetlands.

100-Year Floodplain: The proposed project will not cause displacement of floodwater. The Indiana Department of Natural Resources Division of Water will be consulted for the appropriate permit associated with work in the floodway.

Surface Waters: The proposed project will not adversely affect waters of high quality listed in 327 IAC 2-1-2(3), exceptional use streams listed in 327 IAC 2-1-11(b), or Natural, Scenic and Recreational Rivers and Streams listed in 312 IAC 7-(2), Salmonid streams, or waters on the Outstanding Rivers list (Natural Resources Commission non-rule Policy Document).

Groundwater: Construction of the proposed project will not affect groundwater quality.

Air Quality: Dust and noise will be produced during construction activities.

Open Space and Recreational Opportunities: The proposed project's construction and operation will neither create nor destroy open space and recreational opportunities.

The construction and operation of the proposed project will not affect National Natural Landmarks.

B. Indirect Impacts

The Tipton Municipal Utility's Preliminary Engineering Report (PER) states: *TMU, through the authority of its council, planning commission or other means, will ensure that future development, as well as future collection system or treatment works projects connecting to SRF-funded facilities will not adversely affect wetlands, wooded areas, steep slopes, archaeological/historical/ structural resources, or other sensitive environmental resources. The Utility will require new development and treatment works projects to be constructed within the guidelines of the USFWS, IDNR, IDEM, and other environmental review authorities.*

C. Comments from Environmental Review Authorities

The U.S. Fish and Wildlife Service, in correspondence dated February 9, 2012, stated:

These comments are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

Your letter states that the proposed project will eliminate 2 combined sewer overflows (CSOs) to Buck Creek, converting them to storm water outlets, and reduce discharges to Cicero

Creek from a third CSO. Proposed construction includes installation of a new storm sewer in the northwest part of Tipton; and converting an existing sewer and 2 manholes in the southern part of town to a single larger manhole.

We are not aware of any sensitive natural areas or unique wildlife habitats within the affected stream reaches. Mitigation of CSO problems will improve the quality of the streams and their aquatic habitat. We recommend the following mitigation measures to minimize impacts to the streams during construction.

- 1. Locate the outfalls to minimize disturbance of riparian vegetation and destabilization of stream banks.*
- 2. Minimize erosion and soil runoff to streams during construction. Stabilize and revegetate disturbed stream banks as quickly as possible after construction is completed.*

Endangered Species

*The proposed project is within range of the federally endangered Indiana bat (*Myotis sodalis*). We concur that the proposed project is not likely to adversely affect this listed species. This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of 1973, as amended.*

The Natural Resources Conservation Service, in correspondence dated July 25, 2011 stated that "The project to install new storm sewers in the City of Tipton, Tipton County, Indiana, as referred to in your letter of June 28, 2011, will not cause a conversion of prime farmland."

The Indiana Department of Natural Resources (IDNR) Division of Historic Preservation and Archaeology, in correspondence dated March XX, 2012, stated: Pursuant to IC 13-18-21 and 327 IAC 14 and Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) and 36 C.F.R. Part 800, the Indiana State Historic Preservation Officer ("Indiana SHPO") is conducting an analysis of the materials...for the...project in Tipton, Cicero Township in Tipton County, Indiana.

In regard to buildings and structures, we have identified the following properties within the probable area of potential effects, and we believe that they meet the criteria of eligibility for inclusion in the National Register of Historic Places due to their historical and architectural significance:

The house at 236 N. West St. (Site #159-630-23031) is one of the few high style Queen Anne style homes in the county, and features significant stone and terra cotta details.

Tipton Residential Historic district (Site #159-630-22001-048) is significant as the primary historic residential area of this county seat town. The district includes housing types ranging from the 1860s Greek Revival to many examples of Bungalows and Foursquares from the early 20th century.

Based on our analysis, it has been determined that no historic structures will be altered, demolished, or removed by the proposed project.

In terms of archaeology, it appears that the proposed project area is adjacent to but not within site 12Ti204 (Canton Village). The submission states that brick manholes, catch basins, and roads either are or could be within the project area and will be disturbed by the project. We understand the need for the structural integrity of sewer systems. These brick features should be documented with scaled photographs during the project activities. Please submit this documentation to our office.

If any archaeological artifacts, features or human remains are uncovered during construction, state law (Indiana Code 14-21-1-27 & 29) requires that the discovery must be reported to the IDNR within two (2) business days. Be advised that adherence to Indiana Code 12-21-11-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations.

The IDNR Environmental Unit, in correspondence dated February 16, 2012, stated: The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

Regulatory Assessment: *This proposal will require the formal approval for construction in a floodway under the Flood Control Act, IC 14-28-1, unless it qualifies for a general license under Administrative Rule 312 IAC 10-5 that applies to utility line crossings (see enclosure). Please include a copy of this letter with the permit application if the project does not meet the general license criteria.*

Natural Heritage Database: *The Natural Heritage Program's data have been checked. To date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.*

Fish and Wildlife Comments: *The following measures should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:*

- 1. Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue), legumes, and native shrub and hardwood tree species as soon as possible upon completion.*
- 2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.*
- 3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.*
- 4. Do not cut any trees suitable for Indiana bat roosting (greater than 3 inches dbh) living or dead, with loose hanging bark) from April 1 through September 30.*
- 5. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure.*
- 6. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.*

7. *Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.*
8. *Seed and protect all disturbed streambanks and slopes that are 3:1 or steeper with erosion control blankets (follow manufacturer's recommendations for selection and installation) or use an appropriate structural armament; seed and apply mulch on all other disturbed areas.*
9. *Plant five native trees, at least 2 inches in diameter-at-breast height, for each tree which is removed that is ten inches or greater in diameter-at-breast height.*

VIII. MITIGATION MEASURES

The city's PER states: No long-term negative erosion, siltation, or air quality impacts or impacts to wooded or scrub/shrub, wetlands areas, or steep slopes are expected from this project.

Short-term erosion and siltation impacts will be controlled and monitored by the contractor during the installation and construction of the storm sewers and corresponding structures.

The contractor will take care to install the outfalls with minimal disturbance to the scrub/shrub habitat near Buck Creek.

The contractor will be encouraged to water key construction corridors as needed to control excess dust, and construction activities will be limited to daylight hours to minimize noise impacts in the residential areas.

Any mitigation measures cited in comment letters from the IDNR and the United States Fish and Wildlife Service will be implemented.

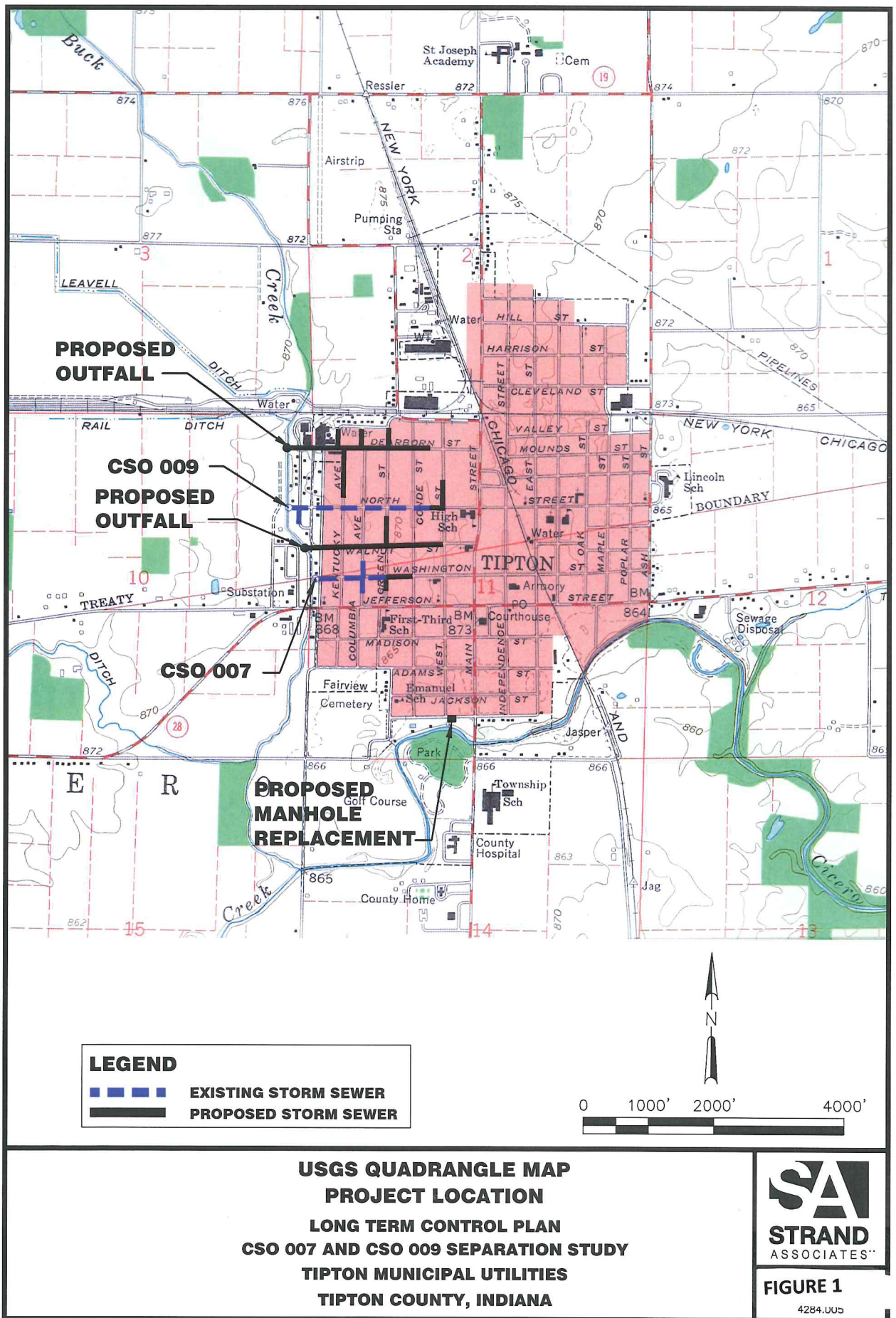
If dewatering is required because of high groundwater, appropriate mitigation measures will be used to ensure dewatering flows do not introduce solids to surface waters.

Best management practices will be implemented during construction to reduce or eliminate waterway siltation and contamination resulting from construction activities.

IX. PUBLIC PARTICIPATION

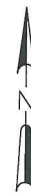
A public hearing was held at the Tipton Municipal Utilities business office at 4:00 PM on October 3, 2011, to discuss the PER and the recommended alternatives to reduce CSO discharges from the combined sewer system. No members of the public attended the hearing, so the public hearing was closed at 4:25 p.m. One written response was submitted in support of the project. One resident called and asked how the project would be funded. The Utility told her that it was seeking funding through SRF and that the loan would be paid over time through the storm water portion of the utility bill.

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Revised January 31, 2012


EXISTING STORM SEWER
PROPOSED STORM SEWER



A horizontal graphic scale bar with four segments. The segments are labeled from left to right: 0, 250', 500', and 1000'. The bar is divided into four equal-length segments by vertical tick marks.

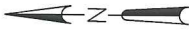
**LONG TERM CONTROL PLAN
CSO 007 AND CSO 009 SEPARATION STUDY
TIPTON MUNICIPAL UTILITIES
TIPTON COUNTY, INDIANA**



FIGURE 2

The map displays a grid of streets in Lincoln, Nebraska. Major thoroughfares include Highway 180 (Lincoln Ave) running north-south and Highway 68 (Dodge St) running east-west. Other significant streets shown are Highway 80 (Fairfax St), Highway 168 (O Street), and Highway 170 (M Street). The map identifies several key locations: the Fairview Cemetery in the southeast, the proposed replacement of a manhole near the intersection of Highway 180 and Highway 68, and two proposed outfalls marked with black rectangles. The map also shows various residential streets, commercial areas, and landmarks like the Lincoln Convention Center and the Lincoln City Hall. The map is oriented with North at the top.

With a strong commercial district and ample manufacturing opportunities, Tipton grew and vast neighborhoods were built. Tipton contains a wide variety of residential resources. The earliest neighborhoods are of



NO SCALE

LEGEND

PROPOSED STORM SEWER



FIGURE 5.02-2

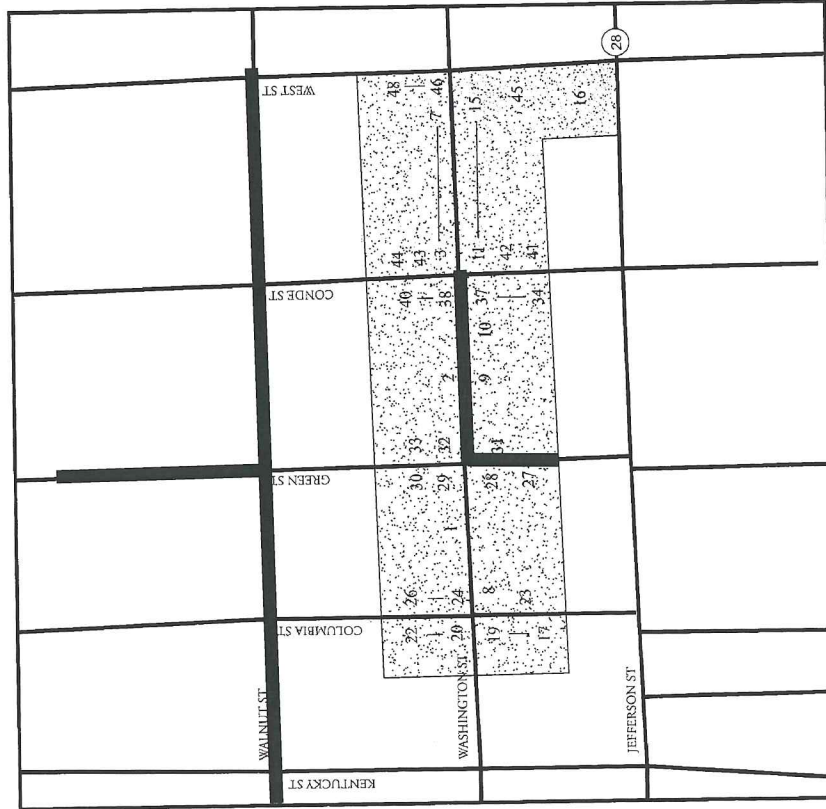
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HISTORICAL SITES MAP CITY OVERVIEW

**LONG TERM CONTROL PLAN
CSO 007 AND CSO 009 SEPARATION STUDY
TIPTON MUNICIPAL UTILITIES**

**FIGURE 3: from Tipton Co. Interim Report
Indiana Historic Sites and Structures Inventory**

Tipton Residential Historic District (159-630-22001-048)



Placed in 1844, Tipton was selected as county seat for the newly formed Tipton County. The first courthouse was built in 1846 on the east side of the downtown square. The town's economic prosperity expanded with the arrival of the Peru and Indianapolis Railroad in 1854. The railroad connected the town to other markets and was bolstered by the rich surrounding farmland. Furthermore the Lake Erie & Western Railroad arrived in the 1870s and added further outlets for trade and commerce in the town.

The proposed Tipton Residential Historic District lies to the north of the town's commercial district. As a result of the town's wealth and prosperity, built in the second half of the 1800s and carried over into the 1900s, this district contains a nice collection of early twentieth century residences, many of brick construction. Dominant building forms found in this district include the bungalow (22019), American foursquare (22038), and L-plan (22043). The district also boasts many high styles such as Prairie (22028) and Colonial Revival (22027). The district also features one of the oldest residences in Tipton, the c.1860 Campbell House (22046).

The historic district is also anchored by two impressive churches. The 1927 First Presbyterian Church (22016) on Jefferson Street is an example of Late-Gothic Revival style architecture and is rated outstanding. The church's congregation was founded in 1854 and the first church building was also on Jefferson Street. The West Street Christian Church (22045) is another outstanding rated building, constructed in the Romanesque Revival style. The West Street Christian Church's congregation dates to 1855 and the current church cost \$30,000 to build in 1908.

Pershing, M. W. *History of Tipton County, Indiana: Her People, Industries, and Institutions.* Indianapolis: B. F. Bowen & Co., 1914.

NO SCALE

LEGEND

PROPOSED STORM SEWER

HISTORICAL SITES MAP TIPTON RESIDENTIAL HISTORIC DISTRICT LONG TERM CONTROL PLAN CSO 007 AND CSO 009 SEPARATION STUDY TIPTON MUNICIPAL UTILITIES



FIGURE 5.02-1

4284-005

FIGURE 4: from Tipton Co. Interim Report
Indiana Historic Sites and Structures Inventory

Revised January 31, 2012